

## **Appendix D.**

### **Diadromous Fishery Pilot Survey Statement of Work**

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## SECTION A: STATEMENT OF WORK

### BACKGROUND

Several recreationally important fish stocks reside primarily in marine/fresh water, but return to fresh/marine waters for spawning. These stocks are called either anadromous or catadromous. Anadromous stocks live primarily in marine waters, but return to freshwater to spawn; catadromous stocks live primarily in freshwater, but return to marine waters to spawn. Because many diadromous (anadromous and catadromous) stocks spend at least a fraction of their time in Federal marine waters, NMFS has been heavily involved in their management (e.g., striped bass along the East Coast, salmon along the West Coast). Examples of diadromous species can be found in Table D.1. Because these species may be caught in both fresh and marine waters, it is important to make certain that the surveys that enumerate effort and catch are comparable in both environments. One possible way to ensure that comparability is to extend the MRFSS into freshwater areas where diadromous fish are present; however, that extension may have possible impacts on the long-term comparability of the MRFSS if fishing in the expanded zone can not be clearly separated from the routine MRFSS. In addition, the characteristics of riverine fisheries may make MRFSS sampling impractical or unnecessarily expensive. Because of these concerns, extension of the MRFSS to inland areas should be done on a pilot survey basis.

The primary purpose of the Diadromous supplemental survey is to examine the potential and/or problems of using the MRFSS methodology to collect data on freshwater diadromous fish throughout their range through a pilot survey. The pilot survey extends the geographical coverage of the MRSS to (1) collect data on the recreational effort directed at these species and (2) to estimate the recreational component of the catch. Data shall be collected on the same time (i.e., waves) basis as the base MRFSS study. If this option is exercised, both the intercept and telephone components of the MRFSS will be affected. This pilot survey would be directed towards a subset of the species found in Table D.1. The intercept pilot survey will be conducted in a clearly defined diadromous zone (the Zone). Diadromous fisheries in New Hampshire, Maryland, and Oregon will be included in the pilot survey in order to appraise the data-collection procedures under different conditions and possible impacts on the routine MRFSS survey and estimates.

### GENERAL REQUIREMENTS

#### 2.0 Overview

The Diadromous Pilot Survey shall consist of the following components:

1. A field **intercept survey** to collect data needed for bimonthly estimation of (a) the number of fishing trips taken by anglers in each mode (i.e., shore, private boat and head/charter boat) and (b) the average catch per trip for all modes participating in the recreational fishery and;

2. A **telephone survey** to collect data needed for bimonthly estimation of the number of fishing trips taken by all anglers within the previous two months.

The Contractor shall be responsible for collecting all data under this contract, as well as conducting all data entry and editing according to NMFS specifications. The Contractor's responsibility shall include coordination of the pilot survey with the base MRFSS and with possible State surveys. All questionnaires must be approved by the NMFS. Current data collection, editing and reporting requirements for the routine MRFSS apply to the extended pilot survey and are provided for in the Statement of Work for the 1999 contract and are incorporated in this Statement of Work by reference. The data formats for the diadromous option should mirror those of the base MRFSS, with the addition of variables necessary for the pilot survey.

Tables D.2 and D.3 show the approximate sample allocations in each pilot state and sampling wave. For the telephone survey, the sample size is the number of interviews with fishing and non-fishing households, and does not include no answer/busy, refusal, or businesses. For the dockside intercept survey, the sample sizes are the numbers of interviews conducted in the Zone with freshwater and saltwater anglers.

## **2.1 Diadromous Zone**

An diadromous zone (the Zone) with clear physical boundaries or other landmarks (bridges, roads, counties, cities, etc.) will be developed in cooperation with the Intercept and Telephone Contractor to clearly demarcate data collected under the pilot survey from routine MRFSS data. Screening questions on the telephone survey will be designed to clearly identify trip data from this zone.

## **2.2. Intercept Survey**

Pilot Survey intercept interviewing in Oregon will not be conducted by the Intercept Contractor, as MRFSS intercept sampling is conducted through a cooperative agreement with the Pacific States marine Fisheries Commission.

The field intercept survey shall be conducted for the purpose of collecting data needed to determine, on a bi-monthly basis, the average catches per angler-trip of all species caught in the Zone. The survey shall be accomplished by intercepting and interviewing anglers in the Zone in accordance with all MRFSS requirements except that the screening questions will not exclude freshwater fishing. The Contractor shall compile a list of appropriate sites for field interviewing and shall differentially weight the sites in relation to their usage by anglers fishing in the Zone. The Contractor shall randomly select interviewing sites in relation to their known fishing activity. Sites shall be weighted by measured fishing activity, hence more heavily used sites shall be sampled more frequently than less heavily used sites. The modifications to the MRFSS questionnaire and variables shall be developed by the Contractor in coordination with NMFS.

The Contractor shall collect length and weight data on each fish as per the Procedures Manual for the MRFSS. As in the base MRFSS, all species of fish that were caught by the angler that is being interviewed will be recorded, regardless of their life history.

For each state, the Contractor shall develop site registers including information on freshwater fishing activity levels at marinas and boat ramps. The definition of a "site" will be consistent with that found in the MRFSS Procedures manual. As there is no site register for inland sites, the intercept contractor shall be required to create a new frame (i.e., site register) for inland locations where these species may be caught. In some areas, this may result in a substantial increase (i.e., several salmon stocks on the Pacific migrate inland hundreds of miles) to the site register. The Contractor will develop the site register through on-site field evaluations conducted by the contractor field supervisor for each state. State agencies, particularly those agencies charged with freshwater fisheries, should be consulted to determine if they have existing site lists. The site register for the diadromous study should mirror that of the base MRFSS. Thus, the site register will not only include the location of the site, but also monthly fishing pressure by day-type (i.e., weekend versus weekday), the best time for conducting interviews, etc. Adequate time should be devoted to this site register development in each state/area prior to conduct of the survey. The preliminary site lists and site activity levels developed shall be subject to review by the Contractor and NMFS at least two weeks prior to the start of interviewing. The Contractor shall review the activity estimates and recommend modifications to the NMFS if the Contractor believes that modifications may be necessary. Each month during the contract period the Contractor will update estimates of fishery activity for each of the listed dockside interview sites for the previous month for use in subsequent months.

Site assignments, assignment tracking, and sampling for the field intercept survey shall follow the protocol discussed in the MRFSS Procedures Manual. The computer program currently used for MRFSS sample selection will be modified by the Contractor to select assignments in the Zone. Sites shall be differentially weighted in relation to their fishing activity (angler-trips). Site assignments shall be drawn at random with replacement from the appropriate list of weighted sites, hence the more heavily used sites shall be selected more frequently than the less heavily used sites for dockside interviewing. The allocations of interviewing assignments among weeks for each sampling area will be proportional to the directed effort in that area.

In addition to routine MRFSS training specified in the Statement of Work and Procedures Manual, the Intercept contractor shall provide training on the purpose of the pilot survey, species identification of the diadromous species, the geographical boundaries of the new sampling zone, the location of access sites in that zone, and special training on the additional interview questions.

### **2.3. Telephone Survey**

The Contractor shall collect effort data as per the Procedures Manual for the MRFSS (Section 3.0), except where noted herein. Because these stocks move into inland regions, it will be necessary to alter the dialing areas to include non-coastal counties, and possibly, counties within inland states (e.g., Idaho). The telephone sample frame will be expanded for this option to include all counties within 25 miles of the river systems where the diadromous species of interest may be encountered.

The NMFS, in cooperation with the Contractor, will decide allocations of State Zone samples among counties. It is possible that all samples in the extended county Zone could be allocated as one stratum, or by the current procedure using allocation by the square root of the population size. This extended sampling may overlap with the option for extending the dialing frame to all inland counties of coastal states and to non-coastal states. In those cases, sampling in those overlapping counties will serve a dual purpose and questionnaire modifications will have to be integrated.

Modifications to the MRFSS routine questionnaire shall be developed by the Contractor in coordination with the NMFS. The major changes are to allow freshwater fishing activity in the screening questionnaire and a series of questions to probe for Zone versus routine MRFSS trips. Because the survey is to evaluate the use of the MRFSS to obtain total estimates for diadromous fisheries, the modified questionnaire might be applied to current sampling of coastal counties to provide data on those participant's freshwater trips. However, in order to preserve the historic comparability of the MRFSS, modified questionnaires will only apply to the expanded dialing area. This will allow adequate testing of the ability to distinguish between saltwater and freshwater trips. An example phone survey questionnaire is included in Attachment D.1.

In addition to routine MRFSS training specified in the Statement of Work and Procedures Manual, the Telephone contractor shall provide training on the purpose of the pilot survey, the list of diadromous species, the geographical boundaries of the new sampling zone, and special training on the additional interview questions.

### **3.0. Survey Reporting Requirements**

The Contractors shall report on the results of the pilot survey in the routine MRFSS wave reports with tables similar to current tables. The Contractor will prepare a final report evaluating the results of the pilot survey with an emphasis on the use of the MRFSS and the efficacy of conducting sampling in the Zone . The content of the report and the delivery of the report shall be consistent with the guidelines for the base MRFSS found in the MRFSS Procedures Manual.

### **4.0. Data Transmittal**

Current data transmittal requirements for the routine MRFSS are provided for in the Statement of Work for the 1999 contract and are incorporated in this Statement of Work by reference.

## **SECTION B - PERIOD OF PERFORMANCE**

The period of performance shall be on an annual basis as provided for the routine MRFSS in the Statement of Work for the 1999 contract and is incorporated in this Statement of Work by reference.

## **SECTION C: CONFIDENTIALITY**

The data collected for the Diadromous Survey shall be used only for statistical purposes, and will be available in identifiable form only to NMFS and its contractors except as otherwise required by law. All requirements of the Privacy Act of 1974 (P.L. 93-579) concerning the collection and use of identifiable information for individuals shall be observed. All copies of the application forms shall be returned to the NMFS or destroyed at the COTR's direction upon completion of the survey.

Table D.1: Diadromous Species that may be taken by Recreational Anglers.

East and Gulf Coast Species			West Coast Species		
Common	Scientific	Type	Common	Scientific	Type
Alewife	<i>Alosa pseudoharengus</i>	A	Coho Salmon	<i>Onchorynchus kisutch</i>	A
Alabama Shad	<i>Alosa alabamae</i>	A	Sockeye Salmon	<i>Onchorynchus nerka</i>	A
Blueback Herring	<i>Alosa aestivalis</i>	A	Chinook Salmon	<i>Onchorynchus tshawytscha</i>	A
Skipjack Herring	<i>Alosa chrysochloris</i>	A	Chum Salmon	<i>Onchorynchus keta</i>	A
Hickory Shad	<i>Alosa mediocris</i>	A	Rainbow Trout	<i>Onchorynchus mykiss</i>	A
Striped Bass	<i>Morone saxatilis</i>	A	Pink Salmon	<i>Onchorynchus gorbuscha</i>	A
American Eel	<i>Anguilla rostrata</i>	C	Striped Bass	<i>Morone saxatilis</i>	A
Sea Lamprey	<i>Petromyzon marinus</i>	A	Eulachon	<i>Thaleichthys pacificus</i>	A
Atlantic Sturgeon	<i>Acipenser oxyrhynchus</i>	A	3-Spined Stickleback	<i>Gasterosteus aculeatus</i>	A
Shortnose Sturgeon	<i>Acipenser brevirostrum</i>	A	Longfin Smelt	<i>Spirinchus thaleichthys</i>	A
Atlantic Salmon	<i>Salmo salar</i>	A	White Sturgeon	<i>Acipenser transmontanus</i>	A
Atlantic Needlefish	<i>Strongylura marina</i>	A	Green Sturgeon	<i>Acipenser medirostris</i>	A
Mountain Mullet	<i>Agonostomus monticola</i>	C	River Lamprey	<i>Lampetra ayresi</i>	A
Striped Mullet	<i>Mugil cephalus</i>	C	Brook Trout	<i>Salvelinus fontinalis</i>	A



East and Gulf Coast Species			West Coast Species		
Common	Scientific	Type	Common	Scientific	Type
Brook Trout	<i>Salvelinus fontinalis</i>	A	Dolly Varden	<i>Salvelinus malma</i>	A
Arctic Char	<i>Salvelinus alpinus</i>	A	Arctic Char	<i>Salvelinus alpinus</i>	A
American Shad	<i>Alosa sapidissima</i>	A	American Shad	<i>Alosa sapidissima</i>	A
Brown Trout	<i>Salmo trutta</i>	A	Arctic Lamprey	<i>Lampetra japonica</i>	A
Rainbow Trout	<i>Onchorynchus mykiss</i>	A	Pacific Lamprey	<i>Lampetra tridentata</i>	A
Gizzard Shad	<i>Dorosoma cepedianum</i>	A	Striped Mullet	<i>Mugil cephalus</i>	A
White Perch	<i>Morone americana</i>	A	Cutthroat Trout	<i>Onchorynchus clarki</i>	A
Yellow Perch	<i>Perca flavescens</i>	A	Bull Trout	<i>Salvelinus confluentus</i>	A
Rainbow Smelt	<i>Osmerus mordax</i>	A	Brown Trout	<i>Salmo trutta</i>	A
Tomcod	<i>Microgadus tomcod</i>	A	Delta Smelt	<i>Hypomesus transpacificus</i>	A
			Coastrange Sculpin	<i>Cottus aleuticus</i>	C

Legend

A Anadromous  
C Catadromous

Table D.2 Approximate sample allocations for intercept sampling of diadromous species.

		<b>Wave</b>					
<b>State</b>	<b>Mode</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>New Hampshire</b>	Party/Charter Boat	0	30	50	50	30	0
	Private/Rental Boat	0	30	50	80	60	0
	Shore	0	30	30	50	50	0
<b>Maryland</b>	Party/Charter Boat	0	20	50	100	50	50
	Private/Rental Boat	0	50	300	400	300	100
	Shore	0	100	200	200	100	50

Table D.3 Approximate sample allocations for telephone sampling of diadromous species.

	<b>Wave</b>					
<b>State</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>New Hampshire</b>	0	200	400	500	300	0
<b>Maryland</b>	0	500	1000	1500	1500	500
<b>Oregon</b>	300	400	1000	1000	2000	300

Table D.4 Diadromous Species and their range in New Hampshire<sup>1</sup>

Common Name	Scientific Name	Range
Sea Lamprey	<i>Petromyzon marinus</i>	All rivers with access to marine waters
Atlantic Sturgeon	<i>Acipenser oxyrhynchus</i>	Few encountered on Little Salmon R. below dam.
American Eel	<i>Anguilla rostrata</i>	Ubiquitous in east; Connecticut R. to Wilder Dam
Alewife	<i>Alosa pseudoharengus</i>	Merrimack R.
Blueback Herring	<i>Alosa aestivalis</i>	Few in Connecticut R. below Bellows Falls
American Shad	<i>Alosa sapidissima</i>	Connecticut R To Bellows Falls
Gizzard Shad	<i>Dorosoma cepedianum</i>	Few in Connecticut R. up to Bellows Falls
Atlantic Salmon	<i>Salmo salar</i>	Connecticut R.
Brown Trout	<i>Salmo trutta</i>	Berry's Brook
Rainbow Smelt	<i>Osmerus mordax</i>	Coastal rivers
3-Spine Stickleback <sup>2</sup>	<i>Gasterosteus aculeatus</i>	Diadromous distribution unknown
White Perch <sup>2</sup>	<i>Morone americana</i>	Lamprey R. below dam at New Market
Striped Bass	<i>Morone saxatilis</i>	Very rare in Connecticut R.
Tomcod	<i>Microgadus tomcod</i>	Found in all coastal streams

<sup>1</sup> Information from several resources (see references) including Cheri Rogers, Ken Sprankle of New Hampshire Fish and Game Department.

<sup>2</sup> Diadromous qualities of these species is debatable. Species are euryhaline, with populations appearing in marine and freshwaters.

Table D.5 Diadromous Species and their range in Maryland<sup>1</sup>

Common Name	Scientific Name	Range
Sea Lamprey	<i>Petromyzon marinus</i>	Potomac R.
Atlantic Sturgeon	<i>Acipenser oxyrhynchus</i>	Potomac and Nanticoke R.
Shortnose Sturgeon	<i>Acipenser brevirostrum</i>	Potomac and Nanticoke R.
American Eel	<i>Anguilla rostrata</i>	Ubiquitous
Alewife	<i>Alosa pseudoharengus</i>	Statewide
Blueback Herring	<i>Alosa aestivalis</i>	Statewide
Hickory Shad	<i>Alosa mediocris</i>	All major drainages (e.g., Potomac, Nanticoke, Patuxent)
American Shad	<i>Alosa sapidissima</i>	All major drainages (e.g., Potomac, Nanticoke, Patuxent)
Gizzard Shad	<i>Dorosoma cepedianum</i>	Statewide
3-Spine Stickleback*	<i>Gasterosteus aculeatus</i>	Diadromous distribution unknown
White Perch*	<i>Morone americana</i>	Ubiquitous along coastal regions
Striped Bass	<i>Morone saxatilis</i>	All major drainages and coastal streams
Striped Mullet <sup>2</sup>	<i>Mugil cephalus</i>	Summer in the major coastal streams.
Yellow Perch <sup>2</sup>	<i>Perca flavescens</i>	Ubiquitous along coastal regions
Tomcod	<i>Microgadus tomcod</i>	All coastal streams

<sup>1</sup> Information from several resources (see references) including Roy Miller of Maryland's Division of Fish and Wildlife.

<sup>2</sup> Diadromous qualities of these species is debatable. Species are euryhaline, with populations appearing in marine and freshwaters.  
Table D.6 Diadromous Species and their range in Oregon<sup>1</sup>

Common Name	Scientific Name	Range
River Lamprey	<i>Lampetra ayresi</i>	All coastal drainages, ascends Columbia R.
Pacific Lamprey	<i>Lampetra tridentata</i>	All coastal drainages, ascends Columbia R.
Green Sturgeon	<i>Acipenser medirostris</i>	Coastal marine, Columbia and Rouge R.
White Sturgeon	<i>Acipenser transmontanus</i>	All major coastal rivers (e.g. Columbia, Willamette, Rouge R.).
American Shad	<i>Alosa sapidissima</i>	Umpqua and Columbia R.
Cutthroat Trout	<i>Onchorynchus clarki</i>	All coastal streams to Cascade Crest, Columbia R. to Deshutes R. confluence
Pink Salmon	<i>Onchorynchus gorbuscha</i>	All coastal streams
Chum Salmon	<i>Onchorynchus keta</i>	Many coastal streams, Columbia R.
Coho Salmon	<i>Onchorynchus kisutch</i>	All coastal streams, Columbia R. up to The Dalles, OR.
Sockeye Salmon	<i>Onchorynchus nerka</i>	Columbia R. and lower Deshutes R.
Rainbow Trout	<i>Onchorynchus mykiss</i>	Coastal streams, Columbia, Rouge, Umpqua, Snake R.
Chinook Salmon	<i>Onchorynchus tshawytscha</i>	Coastal streams, Columbia, Rouge, Umpqua, Snake R.
Longfin Smelt	<i>Spirinchus thaleichthys</i>	May appear in some coastal rivers
Eulachon	<i>Thaleichthys pacificus</i>	Columbia R. to Willamette R.

Table D.6 Continued.

<b>Common Name</b>	<b>Scientific Name</b>	<b>Range</b>
3-Spined Stickleback <sup>2</sup>	<i>Gasterosteus aculeatus</i>	Coastal and Columbia R. drainages
Striped Bass	<i>Morone saxatilis</i>	Some larger coastal rivers and the Lower Columbia R.
Coastrange Sculpin <sup>2</sup>	<i>Cottus aleuticus</i>	Lower reaches of medium to large coastal streams, Columbia to Willamette R.

<sup>1</sup> Information from several resources (see references) including 1995 Oregon Department of Fish and Wildlife Biennial Report.

<sup>2</sup> Diadromous qualities of these species is debatable. Species are euryhaline, with populations appearing in marine and freshwaters.



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## **Attachment D.A**

### **Example of Diadromous Pilot Survey Questionnaire**

**DIADROMOUS RECREATIONAL FISHING QUESTIONNAIRE  
TELEPHONE QUESTIONNAIRE**

Hello, I'm calling long distance for a survey being conducted for the National Marine Fisheries Service of the U.S. Department of Commerce. We're surveying recreational fishermen in various counties. Your telephone number has been selected at random.

- Q1. To help me assign your information to the correct location, do you live in \_\_\_\_\_  
\_county? **(WRITE COUNTY # ON COUNTY LINE)**
- Q2. Is this your permanent, year-round residence? **(CHECK PERMANENT RESIDENCE BOX)**
- Q3. Does anyone in this household go fishing? **(IF NONE, THANK & TERMINATE)**
- Q3a. We want to gather information from people who have been saltwater or freshwater sportfishing, not shellfish, in the last 12 months. Freshwater fishing is for river and reservoir fishing. Saltwater fishing includes fishing in oceans, sounds or bays, or in tidal or brackish portions of rivers. How many people in your household have been sportfishing in the last 12 months in this state or from a boat launched from this state? **(RECORD IN 12-MONTH SW BOX; GOTO 3b)**
- Q3b. How many people in your household have been freshwater sportfishing in the last 12 months in this state or from a boat launched from this state? **(RECORD IN 12-MONTH FW BOX; IF ZERO IN Q3A AND Q3B, THANK & TERMINATE)**
- Q4a. Thinking just about the past 2 months, how many people in your household have been saltwater sportfishing in this state or from a boat launched from this state? **(RECORD IN 2-MONTH SW BOX; GOTO 4b)**
- Q4b. Thinking just about the past 2 months, how many people in your household have been freshwater sportfishing for in this state or from a boat launched from this state? **(RECORD IN 2-MONTH FW BOX; IF ZERO IN Q4A AND Q4B, THANK & TERMINATE)**

Are you that fisherman/one of the fishermen? **(GO TO APPROPRIATE INTRODUCTION)**

**(INTRODUCTION WHEN RESPONDENT IS FISHERMAN)**

I'd like to ask you a few questions about your most recent finfishing trips. This survey is being conducted in accordance with the Privacy Act of 1974, therefore you are not obligated to answer any question if you find it to be an invasion of your privacy. **(TURN PAGE OVER)**

**(INTRODUCTION WHEN OTHER FISHERMAN IN HOUSEHOLD COMES TO THE PHONE)**

Hello, I'm conducting a survey on saltwater and freshwater sportfishing for the National Marine Fisheries Service. By saltwater fishing, I mean fishing in oceans, sounds or bays, or in tidal or brackish portions of rivers. For the purpose of this survey, sportfishing includes only fishing for finfish, not shellfish. I understand that you've been sportfishing in the past 2 months, and I'd like to ask you a few questions about your most recent trips. This survey is being conducted in accordance with the Privacy Act of 1974, therefore you are not obligated to answer any question if you find it to be an invasion of your privacy.

Again, we're interested in those trips where you went after finfish, whether you caught any or not, and in those trips where you might have been going after shellfish but caught finfish. We're not interested in any trips where your main purpose was to catch fish which you would sell to make money.

Q1a. How many saltwater sportfishing trips did you make in the last two months. **(RECORD TOTAL NUMBER OF SW TRIPS.)**

Q1b. How many freshwater sportfishing trips did you make in the last two months. **(RECORD TOTAL NUMBER OF FW TRIPS.)**

Please list the dates of your sportfishing trips for the past 2 months, starting with your most recent trip and working backwards in time. I have a calendar here in front of me so I can help you with the dates.

Q2. When did you last go finfishing? **(ASSIGN TRIP # & RECORD DATE OF TRIP ON TRIP FORM. IF DK DATE, ASK MONTH & THEN ASK IF WEEKDAY OR WEEKEND).**

Q3. Were you fishing from the shore or a boat?

Q3a. **If Q3 is shore**, Were you fishing from a pier, a jetty, a bridge, a beach, or a bank? **(IF MORE THAN ONE MODE WITHIN A MODE CATEGORY (A,B,C,D), CODE THE ONE USED LAST THAT DAY. IF MORE THAN ONE MODE CATEGORY, CODE AS 2 SEPARATE TRIPS WITH THE SAME DATE).**

Q3b. **If Q3 is boat**, Were you fishing from a charter boat, a head boat, or a private boat?

**(IF MORE THAN ONE MODE WITHIN A MODE CATEGORY (A,B,C,D), CODE THE ONE USED LAST THAT DAY. IF MORE THAN ONE MODE CATEGORY, CODE AS 2 SEPARATE TRIPS WITH THE SAME DATE).  
(REPEAT QUESTIONS 1 & 2 UNTIL ALL TRIPS FOR THE PAST 2 MONTHS HAVE BEEN COVERED. THEN GO ON TO Q3+)**

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Now, I'd like a little more information about each of the trips you just mentioned. **(STARTING WITH THE 1ST TRIP MENTIONED, ASK Q3-8 FOR EACH TRIP BEFORE GOING ON TO THE NEXT TRIP)**

- Q4. **(IF PRIVATE BOAT, ASK:)** Thinking about your trip on (date), does the public have access to the place from which your boat left or is it private?  
**(IF PUBLIC, ASK:)** Was it a launch ramp, boat slip, dock mooring or something else?  
**(IF PRIVATE, ASK:)** Was it from a personal residence or dock, a private locked gate marina, a private property unlocked marina or something else?  
**(ALL OTHER MODES, ASK:)** Thinking about your trip on (date), does the public have access to this fishing site or is it private?
- Q5. **(IF BOAT, ASK:)** What time did your boat return? **(IF NOT BOAT, ASK:)** What time did you stop fishing?
- Q6. Was most of your effort that day in freshwater or saltwater?
- Q6a. **If Q6 is saltwater**, was most of your effort that day in the ocean, sound, river, or bay?  
**(PROBE RIVER:)** Were you fishing in the lower part of the river which is brackish or affected by the tide? **(CHECK SW-River BOX & CONTINUE)**  
**(PROBE BAY:)** Was that an open bay or an enclosed bay?  
**(PROBE INLET:)** Were you more toward the outside or more toward the inside of the inlet?
- Q6b. **If Q6 is freshwater**, was most of your effort that day in the river, or bay, stream or lake?  
**(PROBE FOR DIADROMOUS ZONE)**
- Q7 **(IF BOAT, ASK:)** To what county did your boat return? **(IF NO BOAT, ASK:)** In what county were you fishing?

The remainder of the telephone questionnaire (time of day, flexible questions, etc.) Would remain the same.

**(IF MORE THAN 1 FISHERMAN, DON'T FORGET TO ASK ABOUT OTHERS)**

**(VERIFY PHONE # AT END OF INTERVIEW)**